

SEQUENCE LISTING

D2

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Sampson, Hugh A.
Sosin, Howard B.

<120> Methods and Reagents for Decreasing Clinical Reactions to Allergy

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<140> 09/494,096

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<150> 09/248,673

<151> 1999-02-11

<150> 60/073,283

<151> 1998-01-29

<150> 60/074,590

<151> 1998-02-13

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<150> 09/248,674

<151> 1999-02-11

<150> 60/122,566

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<160> 6

<170> PatentIn Ver. 2.1

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Alack Andrew And

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Lys Thr Glu Asn Pro Cys Ala Gln Arg Cys Leu Gln Ser Cys Gln Gln 35

Glu Pro Asp Asp Leu Lys Gln Lys Ala Cys Glu Ser Arg Cys Thr Lys
50 55 60

Leu Glu Tyr Asp Pro Arg Leu Val Tyr Asp Pro Arg Gly His Thr Gly
65 70 75 80

Thr Thr Asn Gln Arg Ser Pro Pro Gly Glu Arg Thr Arg Gly Arg Gln
85 90 95

Pro Gly Asp Tyr Asp Asp Asp Arg Gln Pro Arg Arg Glu Glu Gly
100 105 110

Gly Arg Trp Gly Pro Ala Gly Pro Arg Glu Arg Glu Arg Glu Glu Asp 115 120 125

Trp Arg Gln Pro Arg Glu Asp Trp Arg Arg Pro Ser His Gln Gln Pro 130 135 140

Arg Lys Ile Arg Pro Glu Gly Arg Glu Gly Glu Gln Glu Trp Gly Thr 145 150 155 160

Pro Gly Ser His Val Arg Glu Glu Thr Ser Arg Asn Asn Pro Phe Tyr 165

Phe Pro Ser Arg Arg Phe Ser Thr Arg Tyr Gly Asn Gln Asn Gly Arg 180

Ile Arg Val Leu Gln Arg Phe Asp Gln Arg Ser Arg Gln Phe Gln Asn 195 200 205

Leu Gln Asn His Arg Ile Val Gln Ile Glu Ala Lys Pro Asn Thr Leu 210 215 220

Val Leu Pro Lys His Ala Asp Ala Asp Asn Ile Leu Val Ile Gln Gln 225 230 235 240

Gly Gln Ala Thr Val Thr Val Ala Asn Gly Asn Asn Arg Lys Ser Phe 245 Asn Leu Asp Glu Gly His Ala Leu Arg Ile Pro Ser Gly Phe Ile Ser 265 Tyr Ile Leu Asn Arg His Asp Asn Gln Asn Leu Arg Val Ala Lys Ile 280 Ser Met Pro Val Asn Thr Pro Gly Gln Phe Glu Asp Phe Pro Ala 295 300 290 Ser Ser Arg Asp Gln Ser Ser Tyr Leu Gln Glu Phe Ser Arg Asn Thr 315 310 Leu Glu Ala Ala Phe Asn Ala Glu Phe Asn Glu Ile Arg Arg Val Leu 330 Leu Glu Glu Asn Ala Gly Gly Glu Glu Glu Glu Arg Gly Gln Arg Arg 345

Trp Ser Thr Arg Ser Ser Glu Asn Asn Glu Gly Val Ile Val Lys Val . 355 360 365

Ser Lys Glu His Val Glu Glu Leu Thr Lys His Ala Lys Ser Val Ser 370 375 380

Lys Lys Gly Ser Glu Glu Glu Gly Asp Ile Thr Asn Pro Ile Asn Leu 385 390 395 400

Arg Glu Gly Glu Pro Asp Leu Ser Asn Asn Phe Gly Lys Leu Phe Glu
405 410 415

Val Lys Pro Asp Lys Lys Asn Pro Gln Leu Gln Asp Leu Asp Met Met
420 425 430

Leu Thr Cys Val Glu Ile Lys Glu Gly Ala Leu Met Leu Pro His Phe 435 440 445

Asn Ser Lys Ala Met Val Ile Val Val Val Asn Lys Gly Thr Gly Asn 450 455 460

Leu Glu Leu Val Ala Val Arg Lys Glu Gln Gln Gln Arg Gly Arg Arg 465 470 475 480

Glu Glu Glu Glu Asp Glu Asp Glu Glu Glu Glu Gly Ser Asn Arg Glu
485 490 495

Val Arg Arg Tyr Thr Ala Arg Leu Lys Glu Gly Asp Val Phe Ile Met 500 505 510

Pro Ala Ala His Pro Val Ala Ile Asn Ala Ser Ser Glu Leu His Leu 515 520 525

Leu Gly Phe Gly Ile Asn Ala Glu Asn Asn His Arg Ile Phe Leu Ala 530 535 540

Gly Asp Lys Asp Asn Val Ile Asp Gln Ile Glu Lys Gln Ala Lys Asp 545 550 555 560

Leu Ala Phe Pro Gly Ser Gly Glu Gln Val Glu Lys Leu Ile Lys Asn 565 570 575

Gln Lys Glu Ser His Phe Val Ser Ala Arg Pro Gln Ser Gln Ser Gln 580 585 590

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Gln Leu Glu Arg Ala Asn Leu Arg Pro Cys Glu Gln His Leu Met Gln 35 40 45

Lys Ile Gln Arg Asp Glu Asp Ser Tyr Glu Arg Asp Pro Tyr Ser Pro 50 55 60

Ser Gln Asp Pro Tyr Ser Pro Ser Pro Tyr Asp Arg Gly Ala Gly 65 70 75 80

Ser Ser Gln His Gln Glu Arg Cys Cys Asn Glu Leu Asn Glu Phe Glu 85 90 95

Asn Asn Gln Arg Cys Met Cys Glu Ala Leu Gln Gln Ile Met Glu Asn 100 105 110 Glu Leu Arg Asn Leu Pro Gln Gln Cys Gly Leu Arg Ala Pro Gln Arg 135 Cys Asp Leu Asp Val Glu Ser Gly Gly Arg Asp Arg Tyr 150 <210> 4 <211> 474 <212> DNA <213> Arachis hypogaea <400> 4 ctcaccatac tagtagecet egecetttte etectegteg eccaegeate tgegaggeag 60 caqtqqqaac tccaaqqaga caqaaqatqc caqaqccaqc tcgaqagggc gaacctgagg 120 ccctgcgagc aacatctcat gcagaagatc caacgtgacg aggattcata tgaacgggac 180 ccgtacagec ctagtcagga tecgtacage cctagtccat atgateggag aggegetgga 240 tcctctcagc accaagagag gtgttgcaat gagctgaacg agtttgagaa caaccaaagg 300 tgcatgtgcg aggcattgca acagatcatg gagaaccaga gcgataggtt gcaggggagg 360 caacaggagc aacagttcaa gagggagctc aggaacttgc ctcaacagtg cggccttagg 420 gcaccacago gttgcgactt ggacgtcgaa agtggcggca gagacagata ctaa <210> 5 <211> 510 <212> PRT <213> Arachis hypogaea <400> 5 Ile Ser Phe Arg Gln Gln Pro Glu Glu Asn Ala Cys Gln Phe Gln Arg Leu Asn Ala Gln Arg Pro Asp Asn Arg Ile Glu Ser Glu Gly Gly Tyr Ile Glu Thr Trp Asn Pro Asn Asn Gln Glu Phe Glu Cys Ala Gly Val Ala Leu Ser Arg Leu Val Leu Arg Arg Asn Ala Leu Arg Arg Pro Phe 50 55 Tyr Ser Asn Ala Pro Gln Glu Ile Phe Ile Gln Gln Gly Arg Gly Tyr

Gln Ser Asp Arg Leu Gln Gly Arg Gln Gln Glu Gln Gln Phe Lys Arg 120

115

65

125

474

75

70

Phe Gly Leu Ile Phe Pro Gly Cys Pro Arg His Tyr Glu Glu Pro His 85 Thr Gln Gly Arg Arg Ser Gln Ser Gln Arg Pro Pro Arg Arg Leu Gln 105 Gly Glu Asp Gln Ser Gln Gln Gln Arg Asp Ser His Gln Lys Val His 120 Arg Phe Asp Glu Gly Asp Leu Ile Ala Val Pro Thr Gly Val Ala Phe 135 130 Trp Leu Tyr Asn Asp His Asp Thr Asp Val Val Ala Val Ser Leu Thr 150 Asp Thr Asn Asn Asn Asp Asn Gln Leu Asp Gln Phe Pro Arg Arg Phe 165 Asn Leu Ala Gly Asn Thr Glu Gln Glu Phe Leu Arg Tyr Gln Gln Gln Ser Arg Gln Ser Arg Arg Ser Leu Pro Tyr Ser Pro Tyr Ser Pro 195 200 185 Gln Ser Gln Pro Arg Gln Glu Glu Arg Glu Phe Ser Pro Arg Gly Gln 215 210 His Ser Arg Arg Glu Arg Ala Gly Gln Glu Glu Glu Asn Glu Gly Gly 230 225 Asn Ile Phe Ser Gly Phe Thr Pro Glu Phe Leu Glu Gln Ala Phe Gln 245 Val Asp Asp Arg Gln Ile Val Gln Asn Leu Arg Gly Glu Thr Glu Ser 265 260 Glu Glu Glu Gly Ala Ile Val Thr Val Arg Gly Gly Leu Arg Ile Leu 280 275 Ser Pro Asp Arg Lys Arg Arg Ala Asp Glu Glu Glu Tyr Asp Glu 295 290 Asp Glu Tyr Glu Tyr Asp Glu Glu Asp Arg Arg Arg Gly Arg Gly Ser 310 305

Arg Gly Arg Gly Asn Gly Ile Glu Glu Thr Ile Cys Thr Ala Ser Ala

325

Lys Lys Asn Ile Gly Arg Asn Arg Ser Pro Asp Ile Tyr Asn Pro Gln 340 345 350

Ala Gly Ser Leu Lys Thr Ala Asn Asp Leu Asn Leu Leu Ile Leu Arg 355 360 365

Trp Leu Gly Leu Ser Ala Glu Tyr Gly Asn Leu Tyr Arg Asn Ala Leu 370 375 380

Phe Val Ala His Tyr Asn Thr Asn Ala His Ser Ile Ile Tyr Arg Leu 385 390 395 400

Arg Gly Arg Ala His Val Gln Val Val Asp Ser Asn Gly Asn Arg Val 405 410 415

Tyr Asp Glu Glu Leu Gln Glu Gly His Val Leu Val Val Pro Gln Asn 420 425 430

Phe Ala Val Ala Gly Lys Ser Gln Ser Glu Asn Phe Glu Tyr Val Ala 435 440 445

Phe Lys Thr Asp Ser Arg Pro Ser Ile Ala Asn Leu Ala Gly Glu Asn 450 455 460

Ser Val Ile Asp Asn Leu Pro Glu Glu Val Val Ala Asn Ser Tyr Gly
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aacaacgaca accagettga teagtteece aggagattea atttggetgg gaacacggag 540 caagagttct taaggtacca gcaacaaagc agacaaagca gacgaagaag cttaccatat 600 agcccataca gcccgcaaag tcagcctaga caagaagagc gtgaatttag ccctcgagga 660 cagcacagcc gcagagaacg agcaggacaa gaagaagaaa acgaaggtgg aaacatcttc 720 ageggettea egeeggagtt cetggaacaa geetteeagg ttgaegacag acagatagtg 780 caaaacctaa gaggcgagac cgagagtgaa gaagagggag ccattgtgac agtgagggga 840 ggcctcagaa tcttgagccc agatagaaag agacgtgccg acgaagaaga ggaatacgat 900 gaagatgaat atgaatacga tgaagaggat agaaggcgtg gcaggggaag cagaggcagg 960 gggaatggta ttgaagagac gatctgcacc gcaagtgcta aaaagaacat tggtagaaac 1020 agateceetg acatetacaa eceteaaget ggtteaetea aaactgeeaa egateteaac 1080 cttctaatac ttaggtggct tggacctagt gctgaatatg gaaatctcta caggaatgca 1140 ttgtttgtcg ctcactacaa caccaacgca cacagcatca tatatcgatt gaggggacgg 1200 gctcacgtgc aagtcgtgga cagcaacggc aacagagtgt acgacgagga gcttcaagag 1260 ggtcacgtgc ttgtggtgcc acagaacttc gccgtcgctg gaaagtccca gagcgagaac 1320 ttcgaatacg tggcattcaa gacagactca aggcccagca tagccaacct cgccggtgaa 1380 aactccgtca tagataacct gccggaggag gtggttgcaa attcatatgg cctccaaagg 1440 gagcaggcaa ggcagcttaa gaacaacaac cccttcaagt tcttcgttcc accgtctcag 1500 cagtctccga gggctgtggc ttaa

O'conc.